

# Summary for



# ESPC 2016

## 中美环境科学与污染控制国际研讨会

China-US Symposium on Environmental Science and Pollution Control

( International Nexus of Food, Energy, Water, and Soil )

Oct 26~29, 2016

主办单位 / HOST :

南京大学 Nanjing University

承办单位 / ORGANIZERS:

南京大学环境学院 School of the Environment Nanjing University

污染控制与资源化研究国家重点实验室 State Key Laboratory of Pollution Control and Resource Reuse

南京大学宜兴环保研究院 Nanjing University, Yixing, Environmental Research Institute

中美生态环境变化联合研究中心 Joint Research Center for Ecosystem and Environmental Change

中国环保科技工业园 China Yixing Industrial Park for Environmental Science & Technology (ES&TP)



污染控制与资源化研究  
国家重点实验室

State Key Laboratory of  
Pollution Control and Resource Reuse



中国宜兴环保科技工业园



中美

CHINA US  
Joint  
Research Center  
for Ecosystem and  
Environmental Change



# Participants

In Front of Howard & Johnson Hotel of Grand Garden, Nanjing, China  
October 26-29, 2017

China-US Symposium on Environmental Science and Pollution Control  
—International Nexus of Food, Energy, Water, and Soil





# Brief Summary

- The China-US Symposium on Environmental Science and Pollution Control (International Nexus of Food, Energy, Water, and Soil) was held on October 26-29, 2016 in Yixing, Jiangsu Province, China. The symposium had more than 150 expert participants (33 from USA, UK and Hong Kong). Participants include Academicians of U.S. National Academy of Sciences, Dr. Warren Washington and Dr. James Jones, and Academicians of Chinese Academy of Sciences, Dr. Quanxing Zhang and Dr. Nanqi Ren. Major participating institutions include National Science Foundation of the USA, Oak Ridge National Laboratory, U.S. National Center for Atmospheric Research, Rice University, University of California, University of Tennessee, University of Oklahoma, Michigan State University, Purdue University, University of Illinois at Urbana Champaign, Heriot-Watt University (UK), Chinese Academy of Sciences, Zhejiang University, Shanghai Jiaotong University, Nanjing University, Harbin Institute of Technology, University of Science and Technology of China, East China University of Science and Technology, Hubei University, China Agricultural University, Nanjing Agriculture University, and other.
- The opening Ceremony was presided by Dr. Jun Bi, Dean of Nanjing University's School of the Environment. Opening speeches were given by Prof. Hailin Xue (NJU Vice President), Prof. Gary Sayler (Director of China-US Joint Research Center for Ecosystem and Environmental Change), Prof. William Brown (Dean, University of Tennessee Institute of Agriculture), Dr. James Jones (Board of National Science Foundation of USA) and Ms. Min Lu (Deputy Mayor of Yixing City). A total of 72 presentations were made at six sessions and two workshops, which covered a broad range of topics including water and soil pollution, food safety, green energy, and graduate education. Seven keynote speeches were made on the opening/ending ceremonies by Prof. Nanqi Ren and six distinguished experts. The symposium greatly promoted not only international cooperation but also partnership among academia, industry and government for achieving global goals of environmental sustainability.

Hongqiang Ren, ES&PC2016 Executive Chairman

- 10月26日至29日，由南京大学主办的2016中美环境科学与污染控制国际研讨会在宜兴举行。此次研讨会是中美绿色合作伙伴计划项目的重要组成部分，来自美国橡树岭国家实验室、美国大气研究国家中心、田纳西大学等多家美国科研机构 and 知名高校，中国科技大学、南京农业大学、南京大学等多个国内高校和科研机构，包含美国科学院资深院士、美国总统奖获得者Warren Washington在内的30余位美国专家、150余位中国学者与会。研讨会开幕式由污染控制与资源化研究国家重点实验室主任毕军主持，南京大学副校长薛海林、田纳西大学教授Gary Sayler、田纳西大学土木与资源学院院长William Brown、美国国家科学基金会James Jones、宜兴市副市长卢敏出席开幕式并致辞。
- 本次研讨会共设8个分会，邀请了包括中国工程院任南琪院士等在内的国际国内著名专家学者做了7场大会特邀报告，并举办72场专题报告会、专项研讨会等多种形式的分会，围绕水和土壤环境污染、食品安全、绿色能源三个重点领域进行热烈的交流与研讨。

任洪强 中美环境科学与污染控制国际学术研讨会组委会主席

# ES&PC 2016 Schedule

Time	Presentation	Location
<b>October 26, 2016 (Wednesday)</b>		
7:00-23:00	<b>Registration</b>	Howard Johnson Garden Plaza Hotel, Hall
11:30-13:30	Lunch	
18:00-21:00	Buffet Dinner	Cafeteria, 4th Floor
<b>October 27, 2016 (Thursday)</b>		
8:30-12:00	<b>Opening Ceremony and Keynote Forum</b>	Shenghui Great Hall, 3rd Floor
12:00-13:30	Lunch	Cafeteria, 4th Floor
13:30-18:00	Session 1: Biofuels and Water Treatment	Room Song-Qing, 3rd Floor
	Session 2: Agroecosystem Health and Human Impact	Room Tang-Yuan, 3rd Floor
	Session 3: Nexus of Human, Climate, and Ecosystem Functions	Room Han-Ming, 3rd Floor
	Workshop for China-US Doctoral Environment & Energy Program (DEEP)	Room Sheng-Hao, 3rd Floor
18:00-20:00	Banquet and Cultural Performance	Shenghui Hall, 3rd Floor
All conference days	Poster Display	3rd Floor
<b>October 28, 2016 (Friday)</b>		
8:30-12:00	Session 4: Environmental Process and Remediation	Room Song-Qing, 3rd Floor
	Session 5: Resources Transformation for Energy and Environment	Room Tang-Yuan, 3rd Floor
	Workshop for Outstanding Young Researchers in Environment & Energy	Room Han-Ming, 3rd Floor
12:00-13:00	Lunch	Cafeteria, 4th Floor
13:30-17:50	Session 6: Nexus of Food, Energy, water and Soil <b>Closing Ceremony and Keynote Forum</b>	Shenghui Great Hall, 3rd Floor
18:00-20:00	Banquet	Room Sheng-Hao, 3rd Floor
<b>October 29, 2016 (Saturday)</b>		
8:30-18:00	<b>Departure and Post-Conference Activity</b>	Yixing ES&T Park

# Invited Distinguished Scientists and Guests from USA



**Dr. Warren Washington**  
Recipient of the U.S.  
National Medal of Science



**Dr. James W. Jones**  
Program Director of NSF  
Directorate for Engineering



**Dr. Bruce K. Hamilton**  
Program Director of NSF  
Directorate for Engineering



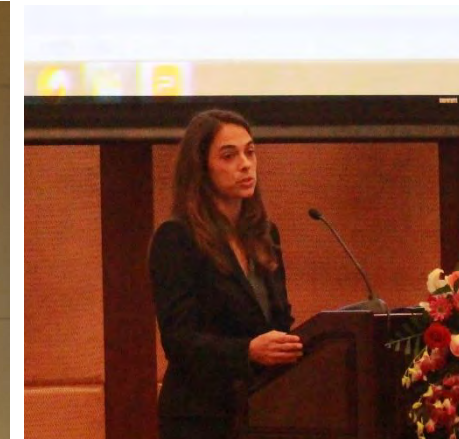
**Dr. Jinhua Zhao**  
Professor and Director  
Michigan State University



**Dr. William F. Brown**  
Dean and Director of the  
Tennessee Agricultural  
Experiment Station



**Dr. John Stier**  
Associate Dean  
Departments of Plant Science  
University of Tennessee



**Dr. Jennifer Jurado**  
Director, Natural Resources  
Planning and Management  
Broward County



**Dr. Frank Loëffler**  
Governor's Chair Professor,  
Director, and Editor of AEM



# Invited Distinguished Scientists and Guests from China



**Nanqi Ren**  
Vice President of Harbin  
Institute of Technology



**Hailin Xue**  
Vice President of Nanjing  
University



**Quanxing Zhang**  
Academician of Chinese  
Academy of Engineering



**Min Lu**  
Deputy Mayor  
of Yixing City



**Renjie Dong**  
Director of the  
International Centre of  
CAU



**Jie Hu**  
Deputy Director of  
International Centre of  
NJU



**Mingan Shao**  
Director of Institute of Soil  
and Water Conservation,  
CAS



**Guirui Yu**  
Deputy Director of  
Institute of Geographic Sci.  
& Natur. Resour. Res., CAS

# Invited Distinguished International Experts



**Dr. Gary Saylor**  
Distinguished Professor,  
ES&T Former Associate Editor



**Dr. Pedro Alvarez**  
Distinguished Professor,  
ES&T Associate Editor



**Dr. Joseph Suflika**  
Distinguished Professor, ES&T  
Former Associate Editor



**Dr. Tong Zhang**  
Professor  
The University of Hong Kong



**Dr. Steven Wilhelm**  
Professor & Associate Head of the  
Department of Microbiology, UT



**Dr. Ernest R. Blatchley**  
Professor of Department of  
Civil Engineering  
Purdue University

# Keynotes Given by Experts

1	Climate Modeling Is Becoming Ecosystem Modeling: Its History and Prediction of Future Environmental Change <i>Warren Washington</i> , National Center for Atmospheric Research, USA
2	Perspective of Fermentative H <sub>2</sub> Production from Biomass for Commercialization <i>Nanqi Ren</i> , Harbin Institute of Technology, China
3	Nanotechnology–Enabled Water Treatment: A Vision to Enable Decentralized Water Treatment <i>Pedro Alvarez</i> , Rice University, USA
4	Keynote: Nitrogen Cycling out of Control: The Need to Renew the Nitrogen Economy <i>Frank Loeffler</i> , University of Tennessee & Oak Ridge National Laboratory
5	Keynote: China's Energy-Water Nexus: Spillover Effects of Energy and Water Policy <i>Jun Bi</i> , Nanjing University
6	Keynote: Uptake of Pharmaceutical Chemicals by Vegetable Crops from Water and Soil <i>Hui Li</i> , Michigan State University
7	Keynote: Building Community Resilience through Integrated Natural Resource and Urban Planning in Broward County, Florida, USA <i>Jennifer Jurado</i> , Broward County, Florida, USA



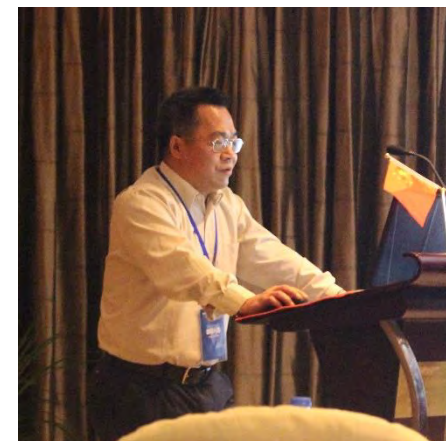
# Invited Leading Scientists from China



**Dr. Fangjie Zhao**  
Distinguished Professor  
Nanjing Agriculture University



**Dr. Jianming Xu**  
Distinguished Professor and  
Dean, Zhejiang University



**Dr. Lingtian Xie**  
Professor of Shenyang Institute  
of Applied Ecology, CAS



**Dr. Jinshui Wu**  
Professor and Director, Institute  
of Subtropical Agriculture, CAS

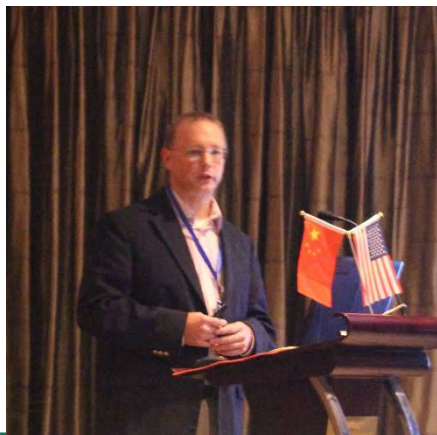


**Dr. Aijie Wang**  
Professor, Research Center of  
Eco-environmental Sci., CAS



**Dr. Shihui Yang**  
Professor  
Hubei University

# Invited Leading Experts from USA



**Dr. Shawn A. Hawkins**  
Associate Professor  
University of Tennessee



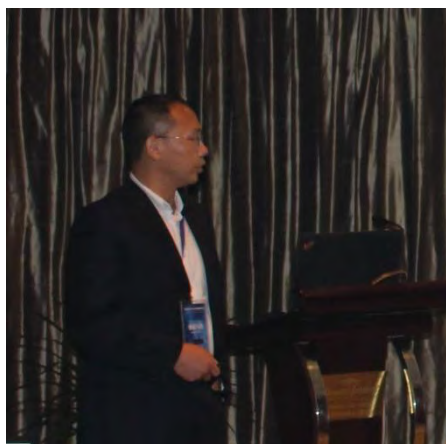
**Dr. Jie (Joe) Zhuang**  
Professor  
University of Tennessee



**Dr. Sindhu Jagadamma**  
Assistant Professor  
University of Tennessee



**Dr. Qiang He**  
Associate Professor  
University of Tennessee



**Dr. Wei Zhang**  
Associate Professor  
University of Tennessee



**Dr. Ling Zhao**  
Associate Professor  
University of Tennessee



# Invited Leading Experts from China



**Dr. Yan Zhu**  
Professor and Dean  
Nanjing Agriculture University



**Dr. Tianming Cai**  
Professor  
Nanjing Agriculture University



**Dr. Guohua Xu**  
Professor  
Nanjing Agriculture University



**Dr. Zhongliang Wang**  
Professor and Dean  
Tianjin Normal University



**Dr. Yufang Song**  
Professor of Shenyang Institute  
of Applied Ecology, CAS



**Dr. Max Cheng**  
Professor, Editor-in-Chief of  
Horticulture Research  
Nanjing Agricultural University

# Invited International Experts



**Dr. Jennifer DeBruyn**  
Associate Professor  
University of Tennessee



**Dr. Theodore B. Henry**  
Professor  
Heriot-Watt University, UK



**Dr. Siqun Wang**  
Professor  
University of Tennessee



**Dr. Brian Leib**  
Associate Professor  
University of Tennessee



**Dr. Hui Li**  
Associate Professor  
Michigan State University



**Dr. Yuji Arai**  
Associate Professor  
University of Illinois at Urbana  
Champaign



# Invited Chinese Experts



**Dr. Jian Hao**  
Associate Professor  
Shanghai Advanced Research  
Institute, CAS



**Dr. Jiping Shi**  
Associate Professor  
Shanghai Advanced Research  
Institute, CAS



**Dr. Jie Bao**  
Professor  
East China University of  
Science and Technology



**Dr. Shourong Zheng**  
Professor  
Nanjing University



**Dr. Chunbo Hao**  
Associate Professor  
China University of  
Geosciences, Beijing



**Dr. Shujuan Zhang**  
Professor  
Nanjing University

# Invited Young Faculty and Students



**Dr. Lin Ye**  
Associate Professor  
Nanjing University



**Dr. Jun Yan**  
Assistant Professor  
University of Tennessee



**Dr. Wei Shi**  
Associate Professor  
Nanjing University



**Dr. Hongxing Chen**  
Assistant Professor, Institute of Applied Ecology, CAS



**Dr. Xijuan Chen**  
Associate Professor,  
Institute of Applied Ecology,  
CAS



**Dr. Dongxing Guan**  
Assistant Professor  
Nanjing University



**Dr. Zhonghua Tong**  
Assistant Professor  
University of Science and  
Technology of China



**Yichen Zhang**  
PhD student, University of  
California, Davis



# Leaders of Organizing Committee



**Dr. Hongqiang Ren**  
Professor and Dean  
Nanjing University



**Dr. Guirui Yu**  
Professor & Deputy Director of  
Inst of Geographic Science  
& Resource Research, CAS



**Dr. Jun Bi**  
Professor & Director of State  
Key Lab, Nanjing University



**Dr. Cheng Gu**  
Professor and Deputy Dean  
Nanjing University



**Dr. Xuaxiang Zhang**  
Professor & Deputy Director of  
State Key Lab, Nanjing University



**Dr. Jie (Joe) Zhuang**  
Professor  
University of Tennessee